

County of San Diego
Revised: September 30, 1994
Reviewed: Spring 2003

JUNIOR AIR POLLUTION CONTROL ENGINEER	Class No. 003694
ASSISTANT AIR POLLUTION CONTROL ENGINEER	Class No. 003693
<u>ASSOCIATE AIR POLLUTION CONTROL ENGINEER</u>	Class No. 003598

DEFINITION:

To perform professional level air pollution control engineering work involving field and plan evaluations of design, installation, and operation of air pollution control equipment for industrial processes, combustion, and incineration; and to perform related work.

DISTINGUISHING CHARACTERISTICS:

All positions in this class series are allocated to the Air Pollution Control District.

Junior Air Pollution Control Engineer:

This is the entry-level class in the Air Pollution Control Engineer series. Under immediate supervision, a Junior Air Pollution Control Engineer performs routine field and plan evaluations of basic air pollution control equipment and commercial and industrial processes.

Assistant Air Pollution Control Engineer:

This is the first working level class in the Air Pollution Control Engineer series. Under general supervision, an Assistant Air Pollution Control Engineer performs field and plan evaluations of basic processes and air pollution control equipment. As more experience is gained, incumbents receive progressively more responsible assignments. Incumbents in this class may also participate in special studies and field tests.

Associate Air Pollution Control Engineer:

This is the journey level class in the Air Pollution Control Engineer series. Under general direction, an Associate Air Pollution Control Engineer performs the full range of field and plan evaluations of industrial and commercial processes and air pollution equipment, requiring considerable judgment and initiative in developing solutions to air pollution control problems and interpreting and applying the district's rules, regulations, and procedures. Selected positions may lead the work of subordinate Air Pollution Control Engineers for specific projects.

EXAMPLES OF DUTIES:

Junior Air Pollution Control Engineer:

Assists in examining, evaluating, and approving the operation of routine industrial processes and air pollution control equipment relative to established district standards for reduction and control of air contaminants; assists in inspecting industrial processes, processing equipment, emission control devices and instrumentation to assure that the installation and operation of equipment comply with Air Pollution Control requirements; assists in computing and correlating engineering data concerning installation of basic air and control equipment for industrial processes; assists in reviewing

plans, permit applications, and making recommendations for the control of industrial operations with potential air pollution problems; and assists in reviewing emissions inventory reports, identifying errors, calculating emissions, and preparing summary reports.

Assistant Air Pollution Control Engineer:

Examines, evaluates, and approves the operation of routine industrial processes and air pollution control equipment according to established district standards for reduction and control of air contaminants; inspects industrial processes, processing equipment, emission control devices and instrumentation to ensure that the installation, licensing, and operation of equipment conforms to air pollution control requirements; computes and correlates engineering data concerning the installation of basic air pollution control equipment for industrial processes; reviews plans and applications and makes recommendations for the control of industrial operations with potential air pollution problems; reviews emission inventory reports; develops emission factors for industrial processes; collects and organizes data for summary reports; and assists in evaluating district rules and regulations, and in preparing recommended revisions to the rules.

Associate Air Pollution Control Engineer:

All of the duties listed above and: examines, evaluates, and approves a wide range of commercial, industrial, and power generating processes and equipment for construction and operation relative to air pollution potential and the reduction and control of air contaminants; evaluates air pollution emission estimates and facility emission inventories; evaluates toxic air contaminant emissions from existing and future sources; prepares technical reports, flow charts, drawings, and sketches of processes and related equipment; sets up emissions test design and documents equipment operations during emissions testing; answers inquires concerning emission control standards, Federal/State and District rules, regulations, procedures, and requirements; may assist in preparing and conducting training programs for subordinate staff (professional and technical) for specific projects; prepares criteria and toxic pollutant emission inventories; reviews health risk assessments; evaluates new developments or advances in air pollution technology; develops new and amended district rules and regulations; may testify as an expert witness on air pollution control matters; and may represent the district on technical committees.

MINIMUM QUALIFICATIONS:

Knowledge Level: T = Thorough; G = General; -- = Not Applicable

Classification Level: Jr = Junior Air Pollution Control Engineer
Asst = Assistant Air Pollution Control Engineer
Assoc = Associate Air Pollution Control Engineer

Knowledge of:

Jr Asst Assoc

G	G	T	The fundamentals of engineering practices, methods, techniques and the standard sources of general engineering information relating to Air Pollution Control.
G	G	T	Techniques and practices used to evaluate air pollution equipment and control devices (design specification, installation, and operation).
--	G	T	Industrial and commercial processes and operations including combustion processes, coating and chemical processes, mechanical processes that involve particulate emissions and petroleum marketing, and storage operations.
--	G	T	Air pollution control equipment design, operation, and use.
--	G	T	Air pollution control source inspection and emissions testing techniques.

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| -- | G | T | Air Pollution Control District rules and regulations. |
| -- | G | G | Air pollution regulatory programs. |
| -- | -- | G | Supervision and training principles and techniques. |

Skills and Abilities to:

The following apply to all classes:

- Conduct evaluations and inspections of industrial equipment and facilities related to contaminant emission capabilities.
- Apply engineering techniques and practices to air pollution control engineering problems.
- Use and maintain engineering and technical equipment relating to Air Pollution Control and abatement.
- Communicate effectively in oral and in written form.
- Establish and maintain effective working relationships with the public, staff, and representatives from public/private agencies.

Associate Air Pollution Control Engineer (in addition to the above):

- Examine, evaluate, and approve a wide range of commercial, industrial, and power generating processes and equipment for construction and operation relative to air pollution potential and the reduction and control of air contaminants.
- Evaluate the technical merits of air pollution emission estimates and facility emission inventories.
- Evaluate toxic air contaminant emissions from existing and future sources and identify public health risks.
- Prepare technical reports, flow charts, drawings, and sketches of processes and related equipment.
- Answer inquiries concerning emission control standards, Federal, State and District rules, regulations, procedures, and requirements.
- Train and review the work of subordinate professional and technical staff.

EDUCATION/EXPERIENCE:

Education, training, and/or experience which clearly demonstrates possession of the knowledge, skills and abilities listed above. Examples of qualifying education/experience are:

Note: Additional years of experience as described below may substitute for the education requirement on a year-for-year basis; OR, completion of appropriate course work from an accredited college or university may substitute for the experience requirement on a year-for-year basis.

Junior Air Pollution Control Engineer:

A bachelor's degree from an accredited college or university in chemical engineering, mechanical engineering or environmental engineering.

Assistant Air Pollution Control Engineer:

A bachelor's degree from an accredited college or university in chemical engineering, mechanical engineering or environmental engineering; AND, one (1) year of experience performing progressively responsible professional level engineering work.

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A bachelor's degree from an accredited college or university in chemical engineering, mechanical engineering or environmental engineering; AND, three (3) years of experience performing progressively responsible professional level engineering work. Previous experience must have included one (1) year of experience performing professional level air pollution control engineering work.

SPECIAL NOTES, LICENSES, OR REQUIREMENTS:

License:

A valid California Class C driver's license or the ability to arrange transportation for field travel is required at time of appointment and must be maintained throughout employment. Employees in this class may be required to use their own personal vehicle.

Working Conditions:

Incumbents may be exposed to dust, fumes, organic vapors, noxious gases, and high temperatures. For protection purposes, incumbents may be required to wear a respirator or other protection equipment. Facial hair that interferes with the respirator seal or prevents proper respirator operation shall be removed.

Incumbents may be required to climb ladders and conduct work at elevated heights.

Probationary Period:

Incumbents appointed to permanent positions in this class shall serve a probationary period of twelve (12) months (Civil Service Rule 4.2.5).